

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

- **Federal Agency Name(s):** National Sea Grant College Program, National Oceanic and Atmospheric Administration, Department of Commerce
- **Funding Opportunity Title:** Aquatic Invasive Species Research and Outreach Program
- **Announcement Type:** Initial Announcement
- **Funding Opportunity Number:**
- **Statutory Authority:** 33 U.S.C. 1121-1131.
- **Catalog of Federal Domestic Assistance(CFDA)Number(s):** 11.417, Sea Grant Support.
- **Dates:** Applications must be received by 4 p.m. (local time) on August 27, 2004 for pre-proposals and by 4 p.m. (local time) November 16, 2004 for full proposals by a state Sea Grant Program [or by the National Sea Grant Office in the case of an applicant in a non-Sea Grant state]. Applications are to be forwarded to the National Sea Grant Office by the state Sea Grant Programs and received by 4 p.m. EST on September 2, 2004 for pre-proposals and by 4 p.m. EST on November 23, 2004 for full proposals.
- **Funding Opportunity Description:** The National Sea Grant College Program seeks to fund research and outreach projects addressing the introduction and spread of aquatic invasive species. The goal of the program is to discover and develop information and tools that can lead to the prevention, monitoring and control of aquatic invasive species threatening United States coastal, oceanic and Great Lakes communities, resources and ecosystems.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The Program seeks to fund research and outreach projects addressing the introduction and spread of aquatic invasive species. The goal of the program is to discover and develop information and tools that can lead to the prevention, monitoring and control of aquatic invasive species threatening United States coastal, oceanic

and Great Lakes communities, resources and ecosystems.

B. Program Priorities

Primary consideration for funding will be given to proposals that address the specific priorities listed below.

1. **Biology and Life History:** Basic biological research into population dynamics, genetics, physiology, behavior, and parasites and diseases of nonindigenous species with the potential to lead to the development of ecologically safe, effective, and inexpensive control. Research on the ecological and environmental tolerances of nonindigenous species with the potential for prediction of eventual geographic and ecological impacts.

2. **Effects on Ecosystems:** Research on the impacts of nonindigenous species at each stage of their life history with the potential for helping natural resource managers determine how to minimize the impacts on established biota and their habitats.

3. **Socioeconomic Analysis (Costs and Benefits):** Research on the potential impacts of nonindigenous species on human health in terms of spread of disease, concentration of pollutants, and contamination or purification of drinking water sources. Economic impact on sport, commercial and tribal fisheries, the recreation and tourism industry, the shipping and navigation industry, and municipal and industrial water users. Use of research results to provide a scientific basis for developing sound policy and environmental law, and for public education and technology transfer.

4. **Control and Mitigation:** Research into various types of control--engineering (redesigning water intakes, etc.), physical (scraping, filtering, etc.), chemical (biocides, antifoulants, etc.), biological (parasites, predators, etc.), and physicochemical (heat, salinity, pH, etc.)--to develop selective and effective controls that minimize adverse ecological/environmental impacts. Outreach activities that will transfer these technologies to the appropriate users.

5. **Preventing New Introductions:** Research and outreach into identifying vectors of aquatic invasive species introduction, developing cost-effective, realistic methods of prevention, and transferring the information to appropriate users. In particular, research to develop, or support the development of, workable and effective methods to reduce or eliminate nonindigenous species introductions by shipborne pathways such as ballast water or hull fouling, without imposing undue hardships on the shipping industry.

6. **Reducing the Spread of Established Populations:** Research and outreach to identify mechanisms for further dispersal of individual established species that will lead to the development of safeguards and protocols to prevent and/or slow the spread of nonindigenous species to uninfested areas, and transfer of that information to

appropriate users.

It is a programmatic priority to support projects that address regional priorities that have been identified by Regional Panels of the Aquatic Nuisance Species Task Force and in State ANS Management Plans, where these occur. Not all regions of the country have Regional Panels, and not all panels have published research and outreach priorities. Not all states have State ANS Management Plans, and not all State ANS Management Plans contain research and outreach priorities. Further information on Aquatic Nuisance Species Task Force Committees, Regional Panel sand State ANS Management Plans can be found at the Internet Web site, <http://www.ANSTaskForce.gov/>.

Potential investigators are encouraged to review the list of recent and currently funded Sea Grant projects related to aquatic invasive species that is available on Sea Grant's aquatic invasive species Web page, (<http://www.seagrant.noaa.gov/research/nonindigenous>).

C. Program Authority for the Aquatic Invasive Species Research and Outreach Program is provided by 33 U.S.C. 1121-1131.

II. Award Information

A. Funding Availability

Depending on the overall funding appropriation for the National Sea Grant College Program, a total of about \$3,900,000 is anticipated to be available to support invasive species research projects, and about \$1,700,000 to support invasive species outreach projects, in FY 2005 and FY 2006.

B. Project/Award Period

Projects can be for a maximum of two years' duration. Start date for selected grants should be no earlier than June 1, 2005.

C. Type of funding instrument

Awards may be made either as grants or, if there is substantial involvement by one or more Federal agencies, as cooperative agreements. Examples of substantial involvement may include collaboration in research, participation in selection of key personnel, or approval of key stages in the project before subsequent steps are undertaken.

III. Eligibility Information:

A. Eligible Applicants

Individuals, institutions of higher education, nonprofit organizations, commercial organizations, State, local and Indian

tribal governments, foreign governments, and international organizations are eligible. Only those who submit preliminary proposals by the deadline are eligible to submit full proposals.

B. Cost Sharing or Matching Requirement

Each proposal must include additional non-federal matching funds equivalent to at least 50% of the federal funds requested; for example, a proposal requesting a total of \$200,000 in federal support would have to include at least an additional \$100,000 in matching funds.

IV. Application and Submission Information

A. Address to request Application Package.

Application criteria may be obtained from Sea Grant College Program Directors. The address of Sea Grant College Program Directors may be found on Sea Grant's World Wide Web home page (<http://www.seagrants.noaa.gov/SGDirectors.html>) or may also be obtained by contacting Dorn Carlson at the National Sea Grant Office (mail address: National Sea Grant College Program, 1315 East-West Highway, R/SG, Rm 11839, Silver Spring, MD 20910; phone: 301-713-2435; or e-mail: Dorn.Carlson@noaa.gov).

B. Content and Form of Application Submission

To prevent the expenditure of effort on proposals that may not be successful, applicants must first submit preliminary proposals. Applications must adhere to the provisions under "Applications" and "Required Elements" below by the deadline of August 27, 2004 for preliminary proposals and November 16, 2004 for full proposals. Failure to follow these restrictions may result in applications being rejected without review.

1. Format Requirements (Preliminary Proposals)

The original and twelve (12) copies of the preliminary proposals must be submitted. The number of pages in the preliminary proposal must be in accordance with the page limitations specified under "Required Elements" (i.e. project description, resumes). All printed pages in the preliminary proposal must be on metric A4 (210mm x 297mm) or 8.5" x 11" paper with at least a 10-point font.

2. Content Requirements (Preliminary Proposals)

Preliminary proposals must include the following three elements:

a. Signed title page: The title page should be signed by the Principal Investigator and should clearly identify the program area

being addressed by starting the project title with "Aquatic Invasive Species Research" or "Aquatic Invasive Species Outreach" as appropriate. Principal Investigators and collaborators should be identified by affiliation and contact information. The total amount of federal funds and matching funds being requested or provided should be listed for each budget period, as well as the source of the matching funds. Preliminary proposals must include matching fund equivalent to at least 50%, of the federal funds requested.

b. Submit a concise (2-page limit) description of the project, its experimental design, its expected output or products, the anticipated users of the information, and its anticipated impact. Applicants should use the Evaluation Criteria for additional guidance in preparing the preliminary proposals.

c. Resumes (1-page limit per Principal Investigator).

In addition, applicants are encouraged (but not required) to include a separate page that lists names of potential reviewers who would be well qualified to review the proposal. Applicants may also identify individuals who they would prefer not to have review the proposal and explain why. These suggestions will be considered during the review process.

3. Format Requirements (Full Proposals)

The original and twelve (12) copies of the full proposals must be submitted. The number of pages in the full proposal must be in accordance with the page limitations specified under "Required Elements" (i.e. project description, vitae). All printed pages in the full proposal must be on metric A4 (210mm x 297mm) or 8.5" x 11" paper with at least a 10-point font.

4. Required Elements (Full Proposals)

Full proposals must include the following seven elements:

a. Signed Title Page: The title page should be signed by the Principal Investigator and the institutional representative and should clearly identify the program area being addressed by starting the project title with "Aquatic Invasive Species Research" or "Aquatic Invasive Species Outreach" as appropriate. The Principal Investigator and institutional representative should be identified by full name, title, organization, telephone number, e-mail address, and mailing address. The total amount of Federal funds and matching funds being requested should be listed for each budget period on this page.

b. Project Summary: This information is very important. It is critical that the project summary accurately describes the research being proposed and conveys all essential elements of the research. The project summary should include:

(1) Title: Use the exact title as it appears in the rest of the application.

(2) Investigators: List the names and affiliations of each investigator who will significantly contribute to the project; start with the Principal Investigator.

(3) Funding request for each year of the project, including matching funds.

(4) Project Period: Start and completion dates. Proposals should request a start date of June 1, 2005 or later. This section should include the rationale for the project, the scientific or technical objectives and/or hypotheses to be tested, and a brief summary of work to be completed.

c. Project Description (15-page limit): Brevity will assist reviewers and program staff in dealing effectively with proposals. Therefore, the Project Description may not exceed 15 pages. Tables and visual materials, including charts, graphs, maps, photographs, and other pictorial presentations, are included in the 15-page limitation; literature citations are not included in the 15-page limitation. Conformance to the 15-page limitation will be strictly enforced. All information needed for review of the proposal should be included in the main text; no appendices are permitted. The project description should include:

(1) Introduction/Background/Justification: Subjects that the investigator(s) may wish to include in this section are: (i) current state of knowledge; (ii) contributions that the project will make to the particular discipline or subject area; and (iii) contributions that the project will make toward addressing the invasive species issues.

(2) Research or Technical Plan: (i) Objectives to be achieved, hypotheses to be tested, and how the objectives must relate to Program priorities; (ii) Experimental design and statistical analysis to be used; (iii) Plan of work, discuss how stated project objectives will be achieved; and (iv) Role of project personnel.

(3) Outcome: Describe how the project outcome will enhance the Nation's ability to prevent, monitor or control aquatic invasive species. If appropriate, describe the how the outcome will affect an identified regional or state invasive species priority.

(4) Coordination with other Program Elements: Describe any coordination with other agency programs or ongoing research efforts. Describe any other proposals that are essential to the success of this proposal.

(5) References and Literature Citations: Should be included, but will not be counted in the 15-page project description limit.

d. Budget and Budget Justification: There should be a separate budget for each year of the project as well as a cumulative annual budget for the entire period of the proposed project. Subcontracts, if any, should have a separate budget page. Matching funds equivalent to 50 percent of the federal funds must be indicated. Each annual budget should include a separate budget justification page that itemizes all budget items in sufficient detail to enable reviewers to evaluate the appropriateness of the funding requested.

Please pay special attention to any travel, supply or equipment budgets and provide details. The total dollar amount of indirect costs must not exceed the indirect cost rate negotiated and approved by the cognizant federal agency prior to the proposed effective date of the award or 100 percent of the total proposed direct costs dollar amount in the application, whichever is less.

e. Current and Pending Support: Applicants must provide information on all current and pending federal support for ongoing projects and proposals, including subsequent funding in the case of continuing grants. The number of person-months per year to be devoted to the projects must be stated, regardless of source of support. Similar information must be provided for all proposals already submitted or submitted concurrently to other possible Federal sponsors, including those within NOAA.

f. Vitae (2-page maximum per investigator)

g. Standard Application Forms: See Address section (IV. A.) for web address for forms. Forms can also be obtained from state Sea Grant programs or the National Sea Grant Office. The following forms must be included:

(i) Standard Forms 424, Application for Federal Assistance, 424A, Budget Information - Non-Construction Programs; and 424B, Assurances - Non-Construction Programs, (Rev 4-88). Applications should clearly identify the program area being addressed by starting the project title "Aquatic Invasive Species Research" or "Aquatic Invasive Species Outreach" as appropriate. Please note that both the Principal Investigator and an administrative contact should be identified in Section 5 of the SF424. For Section 10, applicants should enter 11.417 for the CFDA Number and NOAA Sea Grant Support for the title. The form must contain the original signature of an authorized representative of the applying institution.

(ii) Primary Applicant Certifications. All primary applicants must submit a completed Form CD-511, "Certifications Regarding Debarment, Suspension and Other Responsibility Matters;

Drug-Free Workplace Requirements and Lobbying," and the following explanations are hereby provided:

Nonprocurement Debarment and Suspension. Prospective participants (as defined at 15 CFR Part 26, Section 105) are subject to 15 CFR Part 26, "Nonprocurement Debarment and Suspension" and the related section of the certification form prescribed above applies;

Drug-Free Workplace. Grantees (as defined at 15 CFR Part 26, Section 605) are subject to 15 CFR Part 26, Subpart F, "Government wide Requirements for Drug-Free Workplace (Grants)" and the related section of the certification form prescribed above applies;

Anti-Lobbying. Persons (as defined at 15 CFR Part 28, Section 105) are subject to the lobbying provisions of 31 U.S.C. 1352, "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions," and the lobbying section of the certification form prescribed above applies to applications/bids for grants, cooperative agreements, and contracts for more than \$100,000, and loans and loan guarantees for more than \$150,000, or the single family maximum mortgage limit for affected programs, whichever is greater; and

Anti-Lobbying Disclosures. Any applicant that has paid or will pay for lobbying using any funds must submit an SF-LLL, "Disclosure of Lobbying Activities," as required under 15 CFR Part 28, Appendix B.

(iii) Lower Tier Certifications. Recipients shall require applicants/bidders for subgrants, contracts, subcontracts, or other lower tier covered transactions at any tier under the award to submit, if applicable, a completed Form CD-512, "Certifications Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions and Lobbying" and disclosure form, SF-LLL, "Disclosure of Lobbying Activities." Form CD-512 is intended for the use of recipients and should not be transmitted to the Department of Commerce (DOC). SF-LLL submitted by any tier recipient or subrecipient should be submitted to DOC in accordance with the instructions contained in the award document.

B. Submission Dates and Times

Applications must be received by 4 p.m. (local time) on August 27, 2004 for preliminary proposals and by 4 p.m. (local time) November 16, 2004 for full proposals by a state Sea Grant Program, or by the National Sea Grant Office in the case of an applicant in a non-Sea Grant state. The following are Sea Grant states: Alabama; Alaska; California; Connecticut; Delaware; Florida; Georgia; Hawaii; Illinois, Indiana, Louisiana; Maine; Maryland; Massachusetts; Michigan;

Minnesota; Mississippi; New York; New Hampshire; New Jersey; North Carolina; Ohio; Oregon; Pennsylvania; Puerto Rico; Rhode Island; South Carolina; Texas; Vermont; Virginia; Washington; Wisconsin.

Applications are to be forwarded to the National Sea Grant Office by the state Sea Grant Programs and received by 4 p.m. EST on September 2, 2004 for preliminary proposals and by 4 p.m. EST on November 23, 2004 for full proposals.

Applications will be stamped with the date received at the state Sea Grant Program or the National Sea Grant Office. Applications arriving after the above deadlines will be accepted for review only if the applicant can document that the application was provided to a delivery service that guaranteed delivery prior to the specified closing date and time. In any event, applications received by the National Sea Grant Office or the state Sea Grant Programs later than two business days following the closing date will not be accepted.

V. Application Review Information

A. Evaluation Criteria

The evaluation criteria for both preliminary proposals and full proposals are as follows:

1. Importance and/or relevance and applicability of proposed project to the program goals--the degree to which the proposed work is significant and relevant to NOAA, federal, regional, state, or local invasive species activities. This includes the degree to which the objectives of the activity are relevant to program priorities, the degree to which the potential users of the results have been involved in the planning of the activity, and the degree to which the activity, if successful, will advance the state of the art, science, or industry.

2. Technical/Scientific Merit--whether the approach is technically and scientifically sound and innovative, whether the methods are appropriate, and whether there are clear and achievable project goals and objectives.

3. Overall qualifications of applicants--the degree to which the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project.

4. Project cost--whether the budget is realistic and commensurate with the project needs and time frame. This includes the degree to which inter-institutional and multi-disciplinary programs have been developed in order to leverage funds and resources.

5. Outreach and Education--whether the project provides a focused and effective education and outreach strategy regarding NOAA's invasive species mission. This includes the degree to which the potential users

of the results will be involved in the execution of the activity, the quality of the plan to disseminate the results of the activity to appropriate user groups and the public, whether the project includes ways to assess the effectiveness of proposed activity.

B. Evaluation Criteria Weights

The evaluation criteria are weighted differently, depending on whether a research or an outreach activity is proposed.

1. Research proposal weights:

a. Importance and/or relevance and applicability of proposed project to the program goals (35%).

b. Technical/Scientific Merit (35%).

c. Overall qualifications of applicants (10%).

d. Project cost (10%).

e. Outreach and Education (10%).

2. Outreach proposal weights:

a. Importance and/or relevance and applicability of proposed project to the program goals (35%).

b. Technical/Scientific Merit (10%).

c. Overall qualifications of applicants (10%).

d. Project cost (10%).

e. Outreach and Education (35%).

C. Review and Selection Process

An initial administrative review is conducted at both the preliminary and full proposal stages to determine compliance with requirements and completeness of the application.

Preliminary proposals will be ranked in accordance with the above criteria and their assigned weights by an independent review panel consisting of government, academic, and industry representatives. Panel members will provide individual evaluations of each proposal, and their ratings will be used to produce a rank order of the proposals. The review panel will provide no consensus advice to the Program Officer.

The Program Officer will consider these evaluations in determining which applicants will be encouraged to submit full

proposals. Regardless of whether they are encouraged to submit full proposals, all applicants who submitted preliminary proposals in compliance with the deadlines and other requirements of this announcement are eligible to submit full proposals.

Full proposals submitted to the state Sea Grant Programs or the National Sea Grant Office will be sent to peer reviewers for written reviews. Reviewers will be asked to evaluate the proposals using the evaluation criteria listed in this announcement. A peer review panel consisting of government, academic, and industry representatives will evaluate each full proposal and accompanying written reviews in accordance with the above criteria and their assigned weights. Panel members will provide individual evaluations of each proposal, and their ratings will be used to produce a rank order of the proposals. The review panel will provide no consensus advice to the Program Officer.

The Program Officer will consider these evaluations when recommending to the Selecting Official which applications should be selected for award.

D. Selection Factors

The selecting official shall award in rank order unless the proposal is justified to be selected out of rank order based upon the following factors:

1. Availability of funding
2. Balance/distribution of funds
 - a. Geographically
 - b. By type of institutions
 - c. By type of partners
 - d. By research areas
 - e. By project types
3. Duplication of other projects funded or considered for funding by NOAA/federal agencies
4. Program priorities and policy factors as set out in Section I.B.
5. Applicant's prior award performance
6. Partnerships with/Participation of targeted group

E. Anticipated Announcement and Award Dates

Subject to the availability of funds, awards for successful applications are expected to be made by June 1, 2005. The start date that should be used on the Application for Federal Assistance (Form 424) should be no earlier than this date.

VI. Award Administration Information

1. Award Notices

The notice of award is signed by the NOAA Grants Officer and is the authorizing document. It is provided by postal mail to the appropriate business office of the recipient organization.

2. Administrative and National Policy Requirements

Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements published in the Federal Register on October 1, 2001 (66 FR 49917), as amended by the Federal Register notice published on October 30, 2002 (67 FR 66109). You may obtain a copy of these notices by contacting the agency contact(s) under Section VII, or by going to the website at:
www.access.gpo.gov/su_docs/aces140.html.

3. Reporting

All financial and progress reports shall be submitted in triplicate (one original and two copies). Financial reports are to be submitted to the NOAA Grants Officer and Performance (technical) reports are to be submitted to the NOAA program officer. Program and financial reports are to be submitted semi-annually.

VII. Agency Contact(s)

Dorn Carlson, NOAA R/SG, National Sea Grant Office, 1315 East-West Highway, Rm 11839, Silver Spring, MD 20910, telephone 301-713-2435; via internet at Dorn.Carlson@noaa.gov.